•			•			09	1688,077		/08 (2-92) neet 1 of 3
Form PTC)-1449				Docket Number 3692	12000130	Application N	1mpcr09/160	188
	RMATI	ON DISCLO	OSURE CITATION	N	Applicant	SUGIF	IABA et al		
) ' ' ' '	se se eral sheets i	•		Filing Date October 8	, 1998	Group'Art, Uni	1344	•
JA PR	N 2 5 199	19 (50) 20 (20)	U.S. PA	TEN	T DOCUMENT	r'S	Group Art Jai	770	0
Examine Initials	PABATARY No.	Date	Document No.		Name	Class	Subclass	Filing	
DM-	1.	06/03/69	3,448,377	Seiw	atz et al.	-	- A		ED
D42	2.	02/07/78	4,072,578	Cady	et al.	195	127720	$\mathcal{L}^{\mathcal{L}_{\mathcal{J}}}$	702
-take	3.	11/03/87	4,704,576	Trib	utsch et al.	324	128PD 158PD	10_	
DAR-	4.	07/19/88	4,758,786	Hafe	man	324	158D	17	20
John	5.	08/08/89	4,855,243	Simi	c-Glavaski	434	63		
DA	6.	08/08/89	4,856,073	Farb	er et al.	382	4		
-	7.	10/26/90	4,963,815	Hafe	man	3:24	715		
2002	8.	02/16/93	5,187,096	Giae	ver et al.	435	291		
DAR	9.	07/11/95	5,432,086	Frän	zl et al.	435	291		
-20kr_	10.	10/08/96	5,563,067	Sugihara et al.		435	287.1		
2000	11.	09/22/98	5,810,725	Sugi	hara et al.	Cou	372		
Examiner	Ref.	Date	T	PAT	ENT DOCUME	NTS Class	Subclass	Trans	lation
Initials	No.		Document No.		Country	Class	Subclass	YES	NO
7002	12.	08/31/76	1,514,046	GB					
DK~	13.	4/16/87	3,634,132	DE				Partial	
PAL	14.	03/10/77	52-31825	Japa	n ·			Partial	
DAZ	15.	06/25/80	55-84148	Japa	n				
DARZ	16.	04/15/88	63-84476	Japa	n	-		Partial	
too	17.	01/25/89	0300651	Euro	ре				
12002	18.	05/09/90	0367432	Euro	pe				
TOAL	19.	10/04/90	WO 90/11371	WIP	0			:	
DAC	20.	11/14/91	WO 91/17240	WIP	0		<u> </u>		
TAR	21.	11/26/91	3-265814	Japa	n			Partial	
DA TO	22.	07/24/92	4-204244	Japa	n			Partial	
DAZ	23.	09/17/92	WO 92/15700	WIP	0		•		
DA-	24.	03/09/94	0585933	EP					
DAZ-	25.	03/22/94	06078889	Japa	n			Partial	
ЕХАМП	NER:	Darnet	Rule		DATE CON	NSIDERED:	3-499		
			sidered, whether or not the				line through the	citation if n	ot in

JAN 2 5 1999 8

9/688,077 Sheet 2 of 3

Form PTO-1449

INFORMATION DISCLOSURE OTTATION IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 369212000130

Application Number 09/169,188

Applicant

SUGIHARA et al.

Filing Date October 8, 1998

Group Art Lin 1744

	10	se dever at smeets ij		1 5 5	. 0, .,,0		10
			FOREIGN	PATENT DOCUM	ENTS		7700
Examiner • Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO
Mar-	_26.	10/25/94	06296595	Japan			Partial
			ОТН	ER DOCUMENTS	(inclu	dirig author, title, Dat	e, Pertinent P gos, Etc
Examiner Initials	Ref. No.	OTHER DOCUMENTS (including bythor, title, Date, Pertinon Pros., Etc.) Title					
DEN	27.	Baxter et al., "Microfabrication in silicon microphysiometry" Clin. Chem. 40(9):1800 294 (1994).					
Dron	28.	Brochure for muti channel systems, data acquisition: High end tools for multi electrode measurements-Mea 60-SYSTEM, mea 1060, multi electrode array.					
and a	29.	Company brochure RS "Steckverbindungen-Labor/prüfung 1-1193".					
DA	30.	Company brochure ARIES "Series 537 universal PLCC" and "Series 536 PLCC" (published later but relating to earlier-distibuted components).					
DAS-	31.	Company brochure 3M "Textool sockets and trays" (also relating to an earlier distributed component).					
DAT	32.	Eggers et al., "Electronically wired petri dish: A microfabricated interface to the biological neuronal network" J. Vac. Sci. Technol. B. 8(6):1392-1398 (1990).					
DAN	33.	Gähwiler et al., "Multiple actions of acetylcholine on hippocampal pyramidal cells in organotypic explant cultures" <i>Neurosci.</i> 7(5):1243-1256 (1982).					
SPRY	34.	Gonzales et al., "Cell and explant culture of olfactory chemoreceptor cells" <i>J. Neurosci.</i> 14(2):77-90 (1985).					
DA.	35.	Gross et al., "A new fixed-array multi-microelectrode system designed for long-term monitoring of extracellular single unit neuronal activity in vitro" <i>Neurosci. Lett.</i> 6:101-105 (1977).					
DAI	36.	Gross et al., "Recording of spontaneous activity with photoetched microelectrode surfaces from mouse spinal neurons in culture" J. Neurosci. Meth. 5:13-22 (1982).					
24C	37.	Gross et al., "Long-term monitoring of spontaneous single unit activity from neuronal monolayer networks cultured on photoetched mutielectrode surfaces" J. Electrophysiol. Tech. 9:55-69 (1982).					
TOPPL	38.	Gross et al., "Multielectrode investigations of network properties in neural monolayer cultures", <i>In</i> : Proc. of the sixth southern biomedical engineering conference, pp212-217, Mc Gregor abd Werner, Washington D.C., (1987).					
por	39.	Gross et al., "An approach to the determination of network properties in mammalian neuronal monolayer cultures" <i>Proc. of the First IEEE Conference on Synthetic Microstructures in Biological Res.</i> , Arlie, VA., March 24-26, 1986.					
SUL	40.	Hämmerle et al., "Extracellular recording in neuronal networks with substrate integrated microelectrode arrays". Biosens. Bioelect. 9:691-696 (1994).					
DAR	41.	Hazeki et al., "Modification by Islet-activating protein of receptor-mediated regulation of cyclic AMP accumulation in isolated rat heart cells" J. Biol. Chem. 256(6):2856-2862 (1981).					

conformance and not considered. Include a copy of this form with next communication to applicant.

Forti PTO-1449

INFORMATION DISCESSURE CA

(Use several sheets if necessary)

JAN 2 5 1999 S

Docket Number 369212000130

09/68/077 Sheet 3 of 3

PTO/SB/08 (2-92)

Application Number 09/169,189

Applicant

SUGIHARA et.

IN AN APPLICATED AND AN APPLICATED AND APPLICATED APPLICATED AND APPLICATED AND APPLICATED APPLICATED APPLICATED APPLICATED AND APPLICATED AN

Filing Date October 8, 1998

Group Art Unit 1/144

		OTHER DOCUMENTS (including author, life, Bater Pertinent Pages) Etc.)						
Examiner Initials	Ref. No.	Title						
122	42.	Kuriyama et al., "A single chip biosensor" NEC Res. Develop., No. 78, pp 13, Tokyo, JP (1985).						
plar	43.	Kuroda, "Adenosine/ATP receptor in nervous system and physiologic function" Protein Nucl. Acid Enzyme 29(12):1405-1423 (1984) English Abstract.						
SPET	44.	Nakao et al., "Scanning-laser-beam semiconductor ph-imaging sensor" Sensors & Actuators B 20(2/3):119-123 (1994).						
DA	45.	Nisch et al., "A thin film microelectrode array for monitoring extracellular neuronal activity in vitro" Biosens. Bioelect. 9:737-741 (1994).						
OPP	46.	Novac et al., "Recording from the <i>Aplysia</i> abdominal ganglion with a planar microelectrode array" <i>IEEE Trans. Biomed. Eng. BME-33</i> (2):196-202 (1986).						
John	47.	Novak et al., "Multisite hippocampal slice recording and stimulation using a 32 element microelectrode array" J. Neurosci. Meth. 23:149-159 (1988).						
DAN	48.	Novak et al., "A high-speed multichannel neural data acquisition system for IBM PC compatabilities." J. Neurosci. Meth. 26:239-247 (1989).						
MAN	49.	Suematsu et al., "a receptor" Protein Nucl. Acid Enzyme 29(12):1338-1352 (1984) English Abstrac						
John	50.	Thomas et al., "A miniature microelectrode array to monitor the bioelectric activity of cultured cells" Exptl. Cell Res. 74:61-66 (1972).						
MOV.	51.	Tübingen et al., "2nd CEC workshop on bioelectronics: Interfacing biology with electronics" Biosens. Bioelect. 9:Preface (i) (1994).						
Sie	52.	Yamamoto, "In vitro synaptic activity" Protein Nucl. Acid Enzyme 22(6):502-505 (1977) English Abstract.						
-	53.	Yamamoto et al., "Black widow spider venom: excitatory action on hippochampal neurons" <i>Brain Res. 244</i> (2):382-386 (1982).						
por	54.	Yamamoto, "Electrical activity of brain sector" Protein Nucl. Acid Enzyme 29(12):1205-1211 (1984) English Abstract.						

EXAMINER: Paul Pela! DATE CONSIDERED: 3-1-99

EXAMINER: Initial if citation considered whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.